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SOURCE

Newspapers as indicated.

IMPROVED PROJUCTION METHODS; NEW MAGHINE TOOLS AT MOSCOW KRASNYY PROLETARIY PLANT

Numbers in parentheses refer to appended sources.

The production of a number of lathes was converted to the constant-flow method for the first time in machine-tool-building practice at the Moscow Krasnyy Proletariy Plant. In 1949, the manufacture of new models of high-duty machine tools for high-speed cutting was converted to constant-flow methods. In the first month after this conversion, labor productivity increased 68 percent, losses due to rejects de reased 53 percent, and it became possible to decrease the number of production workers 24 percent and of auxiliary workers 40 percent; 23 percent less equipment was needed.(1)

The drive to save metal has created a great deal of enthusiasm among the workers at the Moscow Krasnyy Proletariy Plant. In the first place, especially good results have been realized by manufacturing parts by pressure casting. Secondly, in machining lathe parts, a large quantity of metal goes into chips and ther scrap. To decrease these losses at the plant, more rigid requirements for blanks have been introduced. God results have been achieved by making parts for formed blanks. A formed blank approximates the shape of a part and thus allowances are decreased a great deal. More than 200 lathe parts have been converted to hot and cold forming.

For example, the manufacture of the lathe spindle was recently converted to forming on a herizontal forging machine, which saved the plant about 100 tons of high-quality steel in one year; the forming of gear blanks for the Model 1A62 lathe saved the plant 12.5 tons of steel in one year.(2)

The application of high-speed methods in machining parts and the enforcing of a number of organizational and technical measures at the plant have effected a consistent decrease in labor input in machine-tool production and a quantitative increase in cutput. Whereas in 1950, labor consumption for Model 1A62 was 534 norm hours, in 1951, it was 439.6, and in 1952, 370.

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In addition to the change in the quantitative indexes, the very structure of the program was changed. In 1346, DIP-20-M lathes were produced; now, the more improved Model 1862 at 1,200 revolutions per minute is being put out, while the manufacture of an even further improved model is being planned.(3)

A screw-cutting lathe with a speed of about 2,000 revolutions per minute has been designed. Its controls are simpler and it is more reliable in operation than Model 1862.(4)

The average monthly wages have increased since 1946, and the output per worker increased 200 percent as compared with 1946.

More than 800 workers, more than 40 sections, and 14 shops at the plant are competing in the output of excellent-quality products.

At the beginning of the widespread development of high-speed metal cutting, Soviet technical literature recommended only cutters with negative rake. The theory was that in operating at high speeds, a temperature is built up in the cutting zone which softens a layer of metal and thus decreases the cutting stress. In practice, high-speed workers at the Moscow Krasnyy Proletariy Plant and at Isboratories have disproved this theory. Gutters with positive rake proved more practical and reliable (3)

The drive to save metal will make it possible for the plant to reduce the consumption of steel in the manufacture if lathes by almost 500 tons in 1952. Dozens of high-speed screw-cutting lathes can be built from the saved metal.(2)

By mid-June, the Moscow krawayy Proletariy Plant had manufactured 25 highspeed screw-cutting latnes for maining shops and suxiliary enterprises of the Stalingrad hydroelectric construction project and 20 such lathes for the Kuybyshev hydroelectric construction project (\*)

The Moscow Krasnyy Projetsky Flant and plants in Kuybyshev, Gor'kiy, Tbilisi, Chkalov, and other machine-took-building enterprises are sending dozens of types of metal-cutting machine tills, including a large number of the latest models, to Lithuania. Plants in Stavropol', Irkutsk, and Kurgan are furnishing woodworking equipment, including unique machine tools.(6)

The Krasnyy Proletariy Flant has designed and manufactured two new types of special high-duty lathes for machining spherical raceways in large inner and outer bearing rings.

Puring the first 4 months of 1972, the enterprise perfected five new models of machine tools. (7)

By 18 June, the manufacture of new powerful lathes and automatics for an automatic transfer machine line for one of the plants of the bearing industry had been started, and the first machine tool for this line had been completed. Two more were being assembled.

At the same time, the plant was beginning to manufacture new semiautomatic machine tools including a cut-off semiautomatic for the tool industry.(4)

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